
UCL (University College London) LIBRARIES MASTERPLAN

Library Report to Estates Management Committee January 2008

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1. Executive Summary

This document is a Report from UCL Library Services to UCL on Master Planning activities and outputs which have been undertaken to quantify use and development of estate in UCL Library Services. Prioritised options have been identified for the UCL Main and Science Libraries, and for a new central site option. This work has also addressed the needs of UCL for long-term offsite storage, which concludes that UCL needs to retain its facility at Wickford for at least the next ten years.

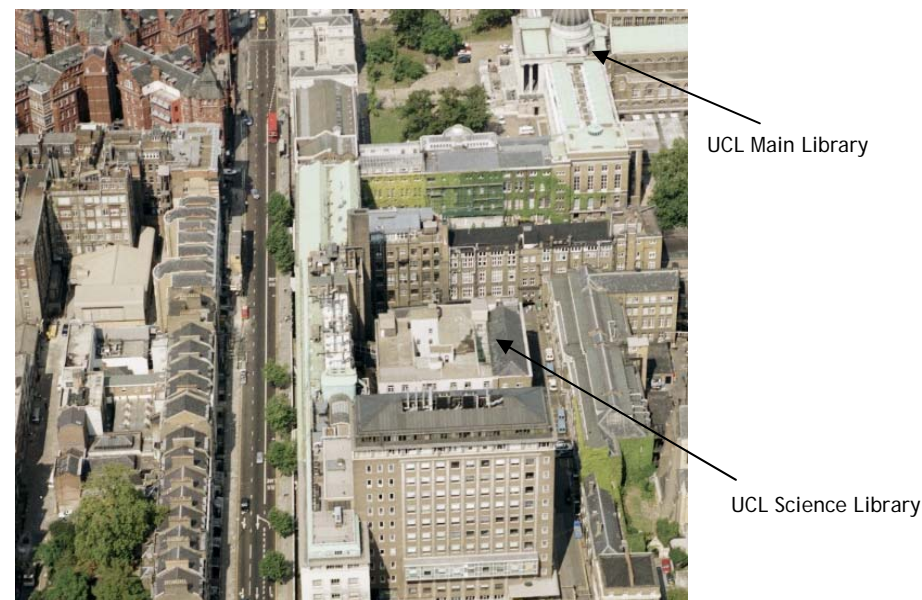


Figure 1: UCL Main and Science Libraries: their location on the Bloomsbury campus

In terms of UCL's Business Objectives for library services, and for academic requirements to support teaching, learning and research, the Master Planning Team has identified and prioritised these requirements with input from the academic members of the Master Planning Team.

The three architectural options, which have been identified for future development of library estate, all offer advantages to UCL, and these are discussed in this Report.

Refurbishment and extension of existing spaces in the Wilkins and DMS Watson Buildings would deliver exciting and tangible benefits to UCL. Extra space has been identified for consolidation of collections and services in the UCL Main Library and possibilities for expansion in the UCL Science Library have been described. The phasing of this work has been discussed and a way forward shown to be feasible; and space for the requisite decanting of collections has been identified. A strategy for funding these developments, a mixture of University monies and external fundraising, would be required. Further design work is also required to develop these options further.

A constraint to substantial development of the existing library estate is the significant levels of disturbance and interruption, over a lengthy time period, that would be required to deliver these architectural solutions. This has led the Master Planning Team to conclude that major levels of development in the present library buildings are impossible and that another option should be explored. A newbuild central site option, where several of UCL's family of libraries could be integrated into one service, emerged from the Options Appraisal Away Day as the recommended option.

A Do-Nothing option is not realistic. The student experience of teaching and learning facilities in UCL is already poor. The findings of the National Student Survey and the I-Barometer data underline this. UCL is nowhere near meriting its 9th position in world university league tables on the basis of the current condition and provision of library estate.



Figure 2: Illustration of the poor physical condition of desks in the UCL Main Library

A central site option would deliver very significant benefits to the UCL academic community. The collocation of staff and services on one site would bring significant economies of scale, and resources could then be re-purposed and new services delivered. New services such as self-service for book loans, using Radio Frequency (RFID) tagging, the introduction of facilities for the use of AV (video, DVD, networked AV resources, off-air recordings), and long-term digital preservation of UCL's academic assets (research papers, e-texts, images, primary data) are all possibilities. Many, but not all, of these innovations are also possible with the refurbishment of existing library buildings. A strategy for funding a central site option would be required, which would comprise a mixture of University monies and external fundraising. There would be no decant issues for library stock, as materials would move from the present buildings to a new

building once it had been constructed. This option brings the possibility of new space for academic departments/income generation opportunities for UCL through the release of significant amounts of space in the Bloomsbury campus.

However, the new build central library option will require a lengthy period to plan, fundraise and implement. Therefore, should this option be pursued, attention will need to be given to ensuring that the quality of the existing accommodation within the UCL Main and Science Libraries does not continue to deteriorate. To provide an increased quality of library accommodation and to ensure that existing facilities are able to respond to and deliver a modern library service, it is therefore recommended that a level of refurbishment of these existing facilities is undertaken. Where refurbishment projects resulting in significant change are considered, e.g. the Donaldson Reading Room, the Brief for these projects should be developed in response to both the need to accommodate library activities and, for the longer term, alternative functions.

A major finding from the Master Planning study is that modern library spaces are not simply collection and reading spaces, but also learning spaces. Also, there is an increasing need to deliver digital content to users. Library spaces will change drastically over the next 10-20 years as technology itself develops. What is required is for UCL to look again at its library estate and to re-model its provision to take account of this development. Group study and project work is now embedded in many parts of the UCL taught curriculum, yet there are no group study spaces in the UCL Main Library and only one in the UCL Science Library - and this is a small facility in a public corridor. The Master Planning team has visited a number of new library and learning facilities, in both the UK and in continental Europe, where such developments have been introduced. It is clear that UCL is lagging behind other universities.



Figure 3: Malmö Public Library, Sweden - an illustration of modern library design, showing study carrels

UCL faces some bold decisions to create research and learning spaces in its libraries, which are fit for purpose for the twenty-first century. Whatever option is chosen for the future development of the library estate, it is essential that the Library Strategy for the UCL family of libraries continues to develop to include all libraries within UCL. In terms of the present Library Strategy 2005-10,¹ there is no doubt that the present condition of the library estate remains both UCL's biggest problem and its most exciting challenge for library provision.

The Master Planning exercise for UCL's library estate has created a new baseline for the development and provision of library services and facilities, which is benchmarked with libraries across Europe. Academic needs for future library developments have been identified. National surveys of the student experience reveal serious weaknesses in UCL's current provision of learning infrastructure, including library estate. Exciting architectural plans would completely renovate and transform the UCL Main and Science Libraries and the student experience of using UCL Library Services and associated new learning spaces and facilities. A prioritised option, namely a central site library development, has emerged in an Options Appraisal Away Day as the preferred option to deliver library facilities to support teaching, learning and research at UCL in the 21st century.

2. Purpose

UCL Library Services is undertaking an appraisal of its use of estate to deliver content and services to UCL staff and students and to its external visitors. Authorised by the UCL Estates Management Committee (EMC), in paper on 1 May 2007 [document Appendix 6/42 (06-07)], the output of this work will provide a blue print for future library accommodation in UCL to support the institution's teaching, learning and research.

3. Membership of the UCL Library Services Master Planning Team

The compilation of this Report to UCL's Estates Management Committee has been undertaken by the UCL members of the UCL Library Services Master Planning Team, comprising: Dr Paul Ayris (Chair), Elizabeth Chapman, Janet Percival, Benjamin Meunier, David Bannister, Professor Michael Worton, and Professor Peter Mobbs. Technical advice has been provided by Tim Leach and Il'ic Testoni (Building Design Partnership), and Julian Broster (Martin Stockley Associates). Quantity Surveyors and Building Services Engineers also contributed to the Options Appraisal.

¹ See <http://www.ucl.ac.uk/Library/libstrat.shtml>.

4. Response to EMC's Strategic Briefing document

As directed by the UCL Estates Management Committee, UCL Library Services invited two senior academic members of UCL staff (Professor Michael Worton, Vice-Provost) and Professor Peter Mobbs (Dean of Life Sciences) to join the Master Planning Steering Group chaired by the Director of UCL Library Services.

The initial Brief from Estates Management Committee asked for a thorough Options Appraisal for the UCL Main and Science Libraries. In the course of consultation with the UCL community, the expressed wishes of staff and students introduced the possibility of considering the future space requirements of the whole of UCL Library Services.

The Business Objectives, and academic contributions to the discussions, identify needs for major work in both the UCL Main and Science Libraries and these informed the architectural options given in the UCL Masterplan Report. The Steering Group analysed the Business Objectives in detail in Figure 10 below; an overview of the findings is given here.

Staff and students find it difficult to navigate their way around both the UCL Main and Science Libraries. This has led to proposals which increase the visibility and legibility

3rd floor plan

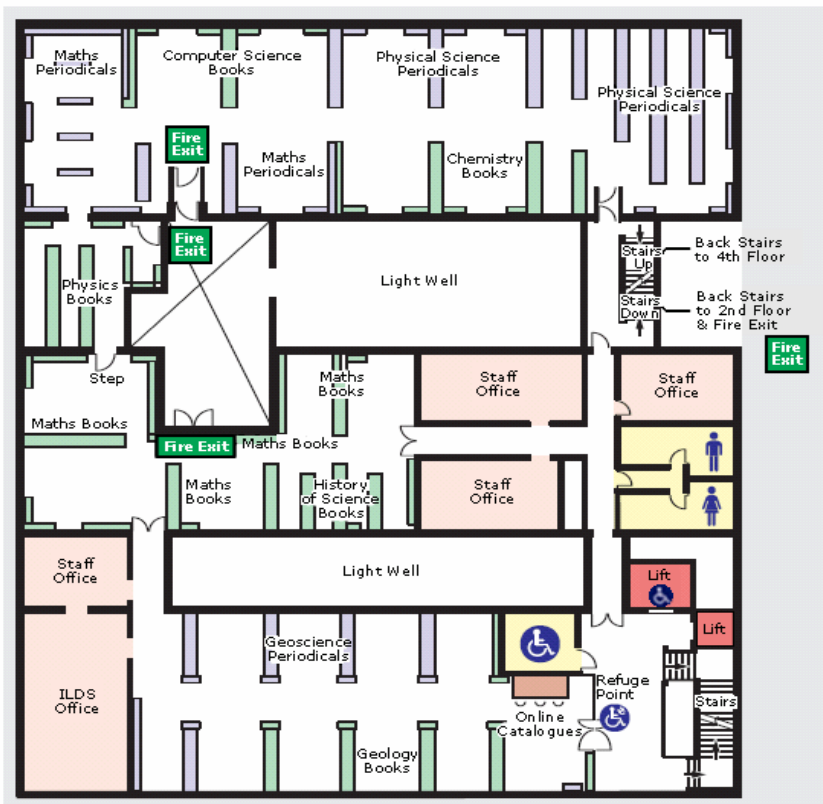


Figure 4: 3rd floor plan of the current UCL Science Library, showing the cramped and unplanned nature of the existing estate

The impact of digital delivery is explicitly addressed in the Business Objectives, and this will also inform the need for a radical overhaul of current infrastructure for power and data. Any move to 24-hr library services will impact on the way libraries operate as new spaces, and social areas will need to be created to cater for students in the Library after midnight (when all other UCL services are closed).

New modes of delivering the curriculum will impact significantly on the way the Library operates. In Science, Technology and Medicine, taught-course students are increasingly undertaking joint projects and are expected to work in teams. There is insufficient space in academic departments for students to work like this, and so students use the Library. Traditional library spaces, based on the concept of storing collections, are inappropriate for this new type of activity, and so library spaces need to become Learning spaces, not simply collection spaces. The move to make library space learning space is one of the major recommendations of this Report.

Libraries will continue to house paper-based collections, particularly in the Arts, Humanities and Social Sciences. In this respect, this Report highlights that the UCL Main Library is already working beyond its capacity to store paper monographs, textbooks and journals. Materials are double-stacked in places. This is bad for the materials (as it causes physical damage) and bad for users, who cannot find materials they need. In addition, library committees in UCL request each year that the Library buys more multiple copies of text books. Currently, this is impossible because the UCL Main and Science Libraries are full and there is no space to store additional texts. Extra space is required to enable the Library successfully to deliver its mission.



Figure 5: Offices in the UCL Main Library, with insufficient space for staff and materials

As libraries change, so they begin to deliver new services and facilities. Development paths for the Library are identified in Figure 10 below, particularly in the creation of a Centre for Digitisation and E-Texts and an in-house digitisation team to undertake the management of discrete digitisation activity on the Library's collections.

In the course of analysing UCL's Business Objectives for library services, the possibility of savings (financial, space, staff) through the collocation of library provision in one site has been considered. Work in this area, supported by some of the more radical architectural options described below, would provide for considerable gain for UCL if the Library, for example, were able to move its Arts and Humanities collections out of the Wilkins Building into a new central-site library. The library spaces in the Wilkins would thus be released for general UCL use and income generation.

As the work of mapping UCL's Business Objectives and academic requirements continued, the Team also considered the impact of a 'do-nothing' option, to enable them to present a full Options Appraisal in this final Report.

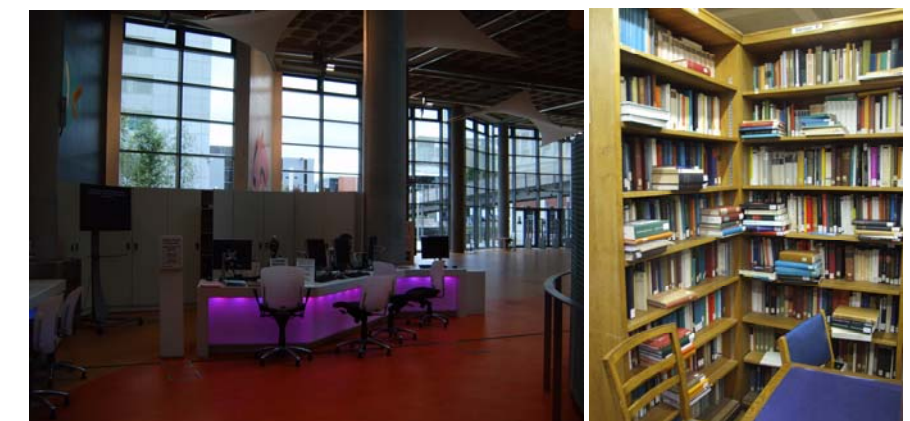


Figure 6: Saltire Centre, Glasgow Caledonian University, newbuild (left) showing the new University Information Services - a new concept for the provision of public services in an academic library; and by comparison a reading area in the UCL Main Library (right), which has no data points to the desks, unsuitable building services, and overcrowded shelves

5. Consultations and Benchmarking

The UCL community has been consulted in a web-based survey, completed by 2,940 people.² There were additionally 1,323 free-text comments received. Members of the Master Planning team also visited exemplar projects in Cambridge (England), the Saltire Centre (Scotland), Copenhagen (Denmark), and Malmö (Sweden).

The Master Planning Team has taken special note of the I-Barometer survey findings for student satisfaction in their experience of UCL as a learning environment.³ The ISB Summer 2007 rankings and satisfaction expressed for library facilities give cause for concern for UCL:

Learning Element	UCL	ISB %	Russell Group %	ISB ranking for UCL	Russell Group ranking for UCL
Library	73.6%	79.4	80	48 (out of 56)	14 (out of 15)
Learning Spaces	71%	79.4	79.1	51 (out of 56)	13 (out of 15)
Technology	76.4%	82.4	83.9	51 (out of 56)	15 (out of 15)

Figure 7: ISB Summer 2007 rankings and satisfaction

The results present a sobering picture of the current level of library provision. For experience of the Library, UCL ranked 48th out of 56 (based on mean scores), although it is noted that a narrow range of scores separates universities in any one category. For learning spaces and technology provision, it was ranked 51st. In terms of the overall learning experience, UCL ranked the lowest in these three categories of all the 17 categories measured. These are not one-off results, but are trends:

Where is UCL behind the pack...?

	Summer 06 (32 institutions)	Autumn 06 (40 institutions)	Summer 07 (56 institutions)
Living Cost	32	34	52
Catering	30	37	52
Learning Spaces	31	40	51
Technology	29	38	51
Accommodation quality	17	21	49
Library	29	35	48
Halls welfare	25	32	47
Learning support	24	14	47
Worship facilities	20	35	47

Figure 8: Trends in UCL performance

Where do UK institutions fall most behind overseas institutions in terms of learning experiences and facilities?

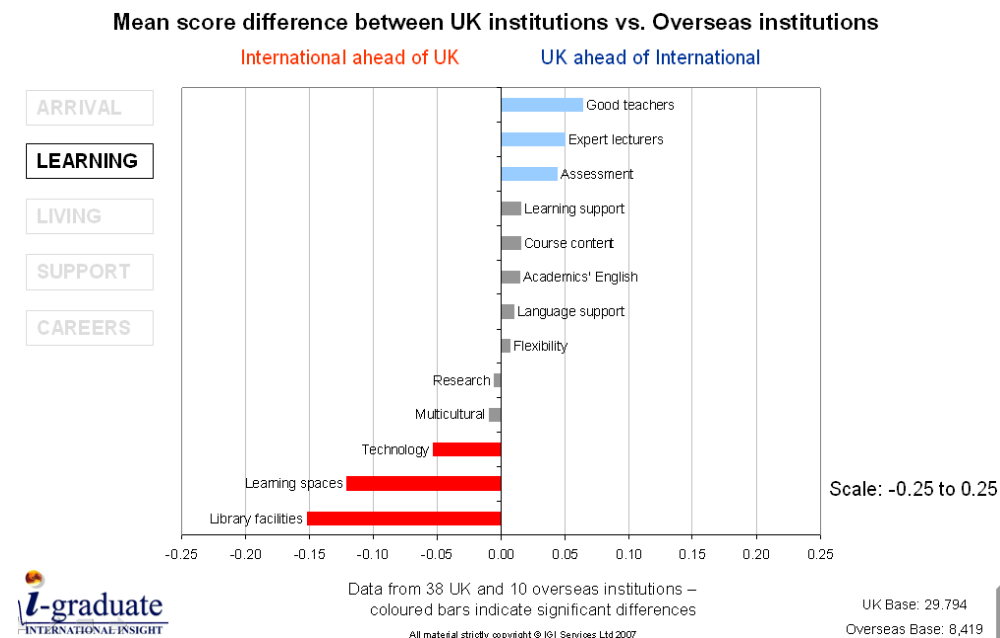


Figure 9: Comparison of UCL strengths and weaknesses compared to international comparators

The findings seem conclusive. It is again in the areas of technology provision, learning spaces and (most of all) library facilities where UCL is failing in comparison with international competitors. UCL may well be 9th in the current World League Table of Universities,⁴ but UCL's provision for library, learning and technology spaces does not merit such an accolade. Indeed, in terms of library facilities, library provision is the weakest of all areas in learning support when compared with international benchmarks.

The findings of I-Barometer surveys, and the trends which it is detecting, convinced the Master Planning Team that the present situation regarding library accommodation was not acceptable.

² See <http://www.ucl.ac.uk/Library/buildsurvey2007.shtml>.

³ I am grateful to Nigel Percival for providing this data and for his help in its interpretation.

⁴ See http://www.timesonline.co.uk/tol/life_and_style/education/article2827773.ece.

6. UCL’s Business Objectives for library services and the Master Planning Team’s response

UCL’S Business Objectives for Library Services	Master Planning Team Response
<p>1. The provision of accommodation which is suitable for housing UCL’s important book collections and provides a satisfactory environment for readers and staff</p>	<p>In its 175-year history, UCL has never possessed a purpose-built library. ‘The history of the library is the history of the college in miniature. It was planned upon a noble scale; it subsisted for many years in penury’. H.H. Bellot, <i>University College London 1826-1926</i> (London, 1929), p. 417.</p> <ul style="list-style-type: none"> Arts and Humanities collections in the Wilkins Building do not have adequate storage space. Some books are double-stacked. This causes damage to the books and inconvenience for users as materials cannot be located. The Master Planning Team proposes increasing the amount of space available for storage of collections through, for example, the expansion of the library footprint to include the former French Corridor Academic departments complain that there is not adequate seating space for the numbers of students wishing to study. The Master Planning Team proposes that additional space can be provided by the addition of mezzanines in the Main Library and the incorporation of the Former French Corridor into the library footprint; and in adding extra volume to the Science Library by absorbing the existing Petrie Museum space (once it has moved to the UCL Institute for Cultural Heritage) Adequate study space in the Library is vital because, unless students live in halls of residence nearby, the Library is only place available for study in central London New modes of learning: group and project study. Only 1 area - in the Science Library - can provide this, and this area also acts as a public corridor.

UCL’S Business Objectives for Library Services	Master Planning Team Response
	<ul style="list-style-type: none"> Libraries have changed from collection spaces to open learning spaces. A variety of different types of space is required - from complete quiet to large, noisy public areas Spaces need to offer different acoustic environments, providing a range of study environments Basement of the Science Library floods. Special Collections are still stored here (not destined for the UCL Institute for Cultural Heritage, due to lack of space there). Professional conservator advice is that the Basement of the Science Library is unsuitable for storing ANY library materials. This space needs to be made good to the Library by the provision of extra, new space elsewhere Staff accommodation. Offices in the Main and Science Libraries are unsuitable for effective communication and teamwork Difficulty in identifying library buildings - a core student service within the campus. Poor image presented by the external appearance of the Science Library building Access and orientation difficulties also perpetuate the issue of poor image
<p>2. The provision of high levels of public IT and audiovisual facilities, particularly in the UCL Main Library which is seriously under-provided for in this area.</p>	<ul style="list-style-type: none"> Both UCL Main and Science Libraries now provide radio-networking via RoamNet Power not available to the individual desktop to power IT connectivity No teaching/seminar spaces IT-enabled available in the two current sites for formal library-based teaching/seminars UCL Main Library provides only 10 cluster machines for public use - grossly inadequate for a Library which can have 2,000 visits a day in term. RoamNet may not be seen as

UCL’S Business Objectives for Library Services	Master Planning Team Response
	<p>providing a sustainable alternative to hardwired cluster machines</p> <ul style="list-style-type: none"> Cluster machines are essential if academic departments set work which is to be assessed as part of taught-course assessment. This is not easily replicated on individual machines which students use via RoamNet because of a lack of ability to manage the desktop centrally There is a need for centrally-streamed video (whole films, video clips incorporated into teaching packages). Academic departments increasingly use video and radio/TV to support academic courses. UCL SSEES provides, through its library, a model for how the Library as a whole can help support departments in this area The Library provides access to thousands of electronic journals and electronic books and, certainly for scientific and medical journals, these are replacing paper provision. Connectivity through power and data points and cluster machines needs to be increased in library spaces to support this transformation
<p>3. Provides refurbished space which accords with current trends and good practice in library design, for the support of teaching and learning, and which is cutting edge, as far as the constraints of the buildings permit.</p>	<p>Current trends</p> <ul style="list-style-type: none"> Lack of group study areas in both buildings is a major impediment to supporting the way the curriculum is increasingly being delivered by academic departments Extensions to opening hours in library sites is inevitable and libraries need to be configured to deal with this type of use - further provision of toilets is required and cafeteria spaces are essential to support any all-day, all-night provision Wayfinding/signage in each building is extremely difficult. Small rooms and connecting corridors/passage ways make the buildings and services extremely difficult to

UCL'S Business Objectives for Library Services	Master Planning Team Response
	<p>use and navigate</p> <ul style="list-style-type: none"> Opening up the floors, and removal of some internal partitions, would provide greater visibility and legibility for library space and enable the collections to be better stored by grouping cognate subjects in a more logical way More coherent and flexible arrangements for the storage and display of collections would allow for greater inter-disciplinary use of the materials (and so of UCL's investment in the Library) than is currently possible UCL committees regularly request that the Library buy more multiple copies of core textbooks. New space is needed to store any increase in paper provision as both libraries are currently full Poor efficiency of existing floor areas, arising from cellular subdivision and general plan configuration <p>Sustainability</p> <ul style="list-style-type: none"> Poor conservation of energy e.g. thermal performance of existing building fabric, roofs, walls, windows, etc. Poor performance (energy) of old services infrastructure. Poor level of control of old services infrastructure Poor levels of passive energy conservation, e.g. solar shading to reduce requirements for mechanical cooling Limited, sustainable, generation of energy, e.g. solar or wind power, No conservation of natural resources, e.g. rainwater harvesting

UCL'S Business Objectives for Library Services	Master Planning Team Response
4. A design which provides for the efficient use of space and respects the historic character of the Wilkins Building.	<p>Wilkins Building</p> <ul style="list-style-type: none"> Work on the new stair to the UCL Main Library shows that it is possible to make interventions into a nineteenth-century grade 1 listed fabric, whilst respecting the history of the building and providing important new, and architecturally-exciting, facilities A full conservation study of the Wilkins Building has been prepared by Alan Baxter & Associates to guide decision making in all work undertaken in the Wilkins <p>Efficiency</p> <ul style="list-style-type: none"> In the current UCL Main and Science Libraries, there is poor efficiency in the use of existing floor areas, arising from cellular subdivision and general plan configuration Time is currently lost by readers moving between buildings to find the books they need/free cluster machines Time is lost by the Library shipping things around between buildings. All deliveries for the Bloomsbury campus, for example, are delivered to the Science Library and then need to be re-delivered to the various library sites in the Bloomsbury area Materials delivery, processing and circulation require review following proposals to pedestrianise Malet Place
5. To be delivered within a project budget approved by UCL's Estates Management Committee	<ul style="list-style-type: none"> Outline costings including temporary space and decanting costs will be provided in the final Report.

UCL'S Business Objectives for Library Services	Master Planning Team Response
6. To achieve a better balance between the provision of:	<ul style="list-style-type: none"> The way students learn, the way the curriculum is delivered in innovative ways, and the move to supporting research in Science, Technology and Medicine digitally means that the nature of the Library as place needs to change Libraries are learning and social spaces, as well as collections spaces. This change of emphasis needs to be reflected in the way space is allocated to these three functions (and new library operations) in the re-designed space Spaces need to be designed flexibly to allow for changes in their use over time as different patterns of use in the Library emerge Visits to exemplar libraries in the UK and on the continent confirm this change in the way libraries are being configured
7. To provide suitable environmental conditions and a sustainable infrastructure for power, IT, mechanical ventilation and heating.	<ul style="list-style-type: none"> The technical infrastructure in the UCL Main Library is inadequate Ventilation systems in the UCL Main Library require complete renewal The Library has had to instate a two-year cleaning programme for every book in the UCL Main and Science Libraries to manage dust problems The UCL Main Library is hot in the summer as there is no air conditioning/comfort cooling. This is bad for materials and bad for people The UCL Science Library's heating system is defective There is an inadequate supply of power points in both buildings to support the use of laptops The Basement of the Science Library regularly floods and materials stored there become dirty due to poor maintenance and ventilation

UCL'S Business Objectives for Library Services	Master Planning Team Response
	<ul style="list-style-type: none"> For the gains which the Steering Group proposes, see the answer to paragraph 3 in this Figure under Sustainability
8. To provide flexible spaces and hardware which can change as technology and methods of learning and research support change.	<ul style="list-style-type: none"> Libraries are changing, but the pace of change is different in each academic subject area which the Library supports For Science, Technology and Medicine digital delivery is the norm to support research. Storage of large runs of paper journals on open shelves is no longer appropriate in many subject areas. In terms of teaching and learning, much teaching is done via textbooks and these will still remain in paper format for the foreseeable future For Arts, Humanities and (some) Social Sciences, provision to support both research and teaching/learning will predominantly remain paper-based for the next 10 years. The pace of change in these areas is much slower, The space for library staff needs to be much more flexible, to allow for changes in staff function over time. There is poor efficiency in the use of existing floor areas, arising from cellular subdivision and general plan configuration and low levels of flexibility
9. To identify how new technology can transform service provision.	<ul style="list-style-type: none"> RFID (Radio Frequency Identity tagging) of the complete bookstock in the UCL Science Library will be undertaken in Summer 2008. In future, students will be able to use self-service for the vast majority of issues and returns via this new technology The UCL Main Library will also need to be converted to RFID tagging to support the introduction of self-service issues and returns for library materials. It is inevitable that RFID

UCL'S Business Objectives for Library Services	Master Planning Team Response
	<p>technology will be introduced into ALL UCL's library sites</p> <ul style="list-style-type: none"> LCD panels should be installed across both UCL Main and Science Libraries to support innovative new ways of providing signage and 'Stop Press' information to users of the library services. This links with UCL's Public Realm strategy The Library is planning that, for long-term archiving of journal literature to support research in Science, Technology and Medicine, preservation will be in digital not physical paper formats. The Library will manage digital preservation through new in-house digital preservation services and through commercial contracts. The model for in-house digital preservation services will be that of Cambridge University Library Long-term preservation of monographs/textbooks will be paper-based, not digital, for at least the next 10-15 years. The impact of new trends in delivery and storage on the role of the Library's remote Store at Wickford are also assessed in this final Report
10. To consider what new services can be offered to the users of the Libraries.	<ul style="list-style-type: none"> The Library has already established a ground-breaking E-Prints repository to make more visible the outputs of academic departments in terms of published journal articles, working papers and UCL Ph.D. theses. These are available, where permissions allow, in Open Access and so freely available to anyone with an Internet connection anywhere in the world The Library wishes to expand its new digital curation service to support academic departments by digitally curating their materials which are produced in UCL in teaching, learning and research - e.g. e-prints

UCL'S Business Objectives for Library Services	Master Planning Team Response
	<p>in the UCL e-prints repository, digital Ph.D. theses, image collections. This will require additional space</p> <ul style="list-style-type: none"> Using the ground-breaking work in its LIFE project with the British Library, the Library will be in a position to determine the most cost-effective modes for long-term preservation - analogue or digital The Library is keen to work with academic departments to establish a library-based Centre for Digitisation and E-Texts. Staff will be project-funded. The facility would act as the base for the production of e-editions and e-texts from the Library's Special Collections in the UCL Institute for Cultural Heritage. The new Humanities Computing Institute will require space for its facilities and services. The new facility will link to cognate work in the new UCL Institute for Cultural Heritage and be modelled on facilities in King's College London The Library needs to establish an in-house digitisation team in order to undertake discrete digitisation projects from materials in its collections, to open up access to them, and for the purposes of preservation. Larger-scale digitisation activity will be outsourced. The in-house unit will require space for its operations The digital core readings service, which provides electronic readings to support taught courses in UCL, needs greater space and staffing capacity in order to manage the move from paper-based readings to digital readings for all UCL academic departments

UCL'S Business Objectives for Library Services	Master Planning Team Response
<p>11. During any refurbishment, UCL Library Services must continue to offer services to staff and students.</p>	<ul style="list-style-type: none"> • The Master Planning Team recognises this as a priority • In term, the UCL Main Library can have 2,000 visitors a day; the UCL Science Library can have as many as 4,000 a day. • Libraries are one of the busiest service points in UCL and the student experience must not suffer during any developments in the Library's estate • Temporary and decant costs will be included in project cost estimates
<p>12. To achieve high approval ratings from Library users and continue to achieve excellent results benchmarking services against SCONUL and international statistics.</p>	<ul style="list-style-type: none"> • Benchmarking data has recently been submitted to the University of Manchester as a member of its international library benchmarking club. Results are expected early in 2008 • UCL monitors its performance annually by using benchmark data collected by SCONUL on behalf of the UK HE library community • UCL Library Services is introducing a set of Key Performance Indicators in the 2007-08 session to monitor its performance • I-Barometer findings, discussed above in paragraph 5, reveal UCL's poor performance for library provision when compared with international competitors • UCL Library Services has reviewed its use of library surveys. It currently surveys internal UCL users every year. In future it will also survey the large population of external researchers and users who make use of UCL Library Services, as this is likely to become a condition of grant for significant levels of external funding to the Library to support these users

Additional business objectives	Master Planning Team Response
<p>13. Collocation of site libraries</p>	<ul style="list-style-type: none"> • One new building for the UCL Main and Science libraries, and selected site library collections, would provide efficiency gains - <ul style="list-style-type: none"> ◦ Multiplicity of staffed service points (e.g. Entrance/Issue Desks) is not needed ◦ Space would be released in the Wilkins Building and in site libraries based in academic departments which can be re-purposed by UCL • Greater legibility and visibility for the Library and its collections would be possible in a purpose-built building • Vehicle access for deliveries to libraries remains problematic on the Science Library site in Malet Place and this is the principal delivery area for a considerable delivery traffic to UCL Library Services. There is insufficient space, particularly in the Science Library, to receive deliveries or to move materials round the building without disturbing readers. Materials delivery, processing and circulation requires review following proposals to pedestrianise Malet Place • There is scope with one new building to reduce duplication of holdings in existing sites • There are efficiencies in terms of readers not having to move between buildings to locate stock/find free cluster machines • There are similar efficiencies in the Library not having to move materials between buildings because of split sites • Logistically, it is easier to build a new-build and to move existing libraries and their services to that site than to maintain existing sites and to refurbish/add extensions while the libraries are also being used to store stock and offer services

Additional business objectives	Master Planning Team Response
<p>14. Creation of one-stop shop for student use of UCL</p>	<ul style="list-style-type: none"> • Master Planning Team has visited Saltire Centre in Glasgow, where this facility has been introduced • A 'One-stop shop' will build on the Information Point already introduced on the Ground Floor of the UCL Main Library • Library henceforth would not simply offer enquiry services for library and information provision, but would offer help and referrals to a whole range of UCL services - e.g. fee payments, UCL Union, Student welfare, Careers Service. A person/people with knowledge of the whole range of services in UCL would point users where to go outside the Library for advice • 'One-stop shop' system would work by Library answering those queries which it could, and then referring student to relevant service and its help desk, with information about its location and opening hours

Figure 10: UCL's Business Objectives and the Master Planning Team's response



Figure 11: Re-modelled ground Floor of the UCL Science Library, now the biggest public cluster in UCL

Note to Figure 11. Figure 11 is interesting as a case study in the re-modelling of the Ground Floor of the UCL Science Library. The enhanced computer cluster is popular with students. However, the design philosophy for the cluster shown in the illustration is the same as that adopted for the majority of UCL's student computing provision. Such cluster rooms have simply been designed to house the maximum possible number of terminals. As a result the students sit facing one another and the furniture provided does not allow for any flexibility in the use of space. Cluster rooms based on achieving the highest possible density of terminals, whilst being maximally effective in improving the computer to student ratio, are not suited to group work, have a 'battery hen' feel to them, and because of the sight lines and seating arrangements present difficulties when 'from the front' teaching is required. UCL has only recently begun to experiment with flexible furnishing in cluster spaces; other institutions are much further forward and many have used library space as somewhere to provide computing arrangements in which students can use desktop or laptops in reconfigurable arrangements that also provide for the rooms to be used for private study, seminars or other purposes. It is also the case that the design of some of these libraries enables student access to computer projection facilities to facilitate the discussion of group project work. Such libraries often also allow students to loan laptops, digital camcorders and other devices to enable them to develop and edit multimedia materials.

7. The Library of the Future

7.1 Research reports

As part of its work, the Master Planning Team commissioned a number of papers from library staff members, who were asked to advise what the library of the future might look like in the following areas:

- The advantages/disadvantages of a centralised library service
- Issue Desk services in a centralised library service
- Staffing in a centralised service
- Options for classification in a centralised library service
- Implications of mass digitisation projects and E-Books
- Criteria for the retention and disposal of materials
- Delivery of multimedia resources
- Public access to academic libraries

The academic members of the Master Planning Team outlined how they saw library use changing in their areas of speciality.

In Science, Technology and Medicine, students are increasingly required to do project work and to work in teams. Project work will probably need to be presented digitally (i.e. web-based, with Audio and Video elements). Lots of project work requires private study space. Students find it difficult to find adequate space to work together on projects. Laptops and digital recorders are needed from the Library. AV needs to be provided in library spaces. IT-enabled teaching spaces for students are needed, e.g. Adobe Premier & Photo editing will be required by everyone in 5-10 years. Former projects should be made available for next-year students. This could be a Library operation via its digital repository service.⁵ Photo and video editing are increasingly important as a component of student projects and course work, and as skills increasingly required in the world of work and academia. The outputs which students produce could in themselves become an important learning resource for future students.

In the Arts, Humanities and Social Sciences, the move to e-resources is driven by journals while E-Books are moving at a slower pace. There is a need for AV in soundproof and non-soundproof rooms, to allow students to work in groups. Group work is increasingly important in Arts & Humanities, especially for 3rd and 4th years. Project outputs (e.g. Bartlett models, films) should be held in UCL Library Services. Users need monographs, in many areas not just for the last few years but for the last decade or even earlier. These books will need to be held in open access in the Library, NOT in store. There is a need for a variety of study

spaces: single/group study. The rise in inter-disciplinary work bolsters the need for a central library building, to enable students to share resources and work together.

7.2 Vision for the Library of the Future

Combining UCL's Business Objectives for library services and academic requirements for the future led the Master Planning Team to identify an exciting vision for the Library of the Future:

- Library spaces are not simply collections spaces, but also learning spaces which cater for private, group and project work and study
- New services, in terms of support for academic departments in embedding IT and AV delivery into the curriculum, are required and the Library has a role here
- A Centre for Digitisation and E-Texts would act as the catalyst for research and development in this area, centred on digital texts, images and editions
- Through the use of RFID technology, UCL Library Services can introduce self-service facilities for the issue and return of books which will be very popular with students
- Greater emphasis can be placed on the Library's digital core readings service to underpin the provision of core readings at taught-course level; and on the Library's Information Skills training packages
- Development of new services such as the Library's Open Access E-Prints repository and its new digital curation service will support the research needs of academic departments, both for secondary research outputs and in offering advice and guidance on the digital curation of primary data
- By looking again at services to the general public, the Library can help support UCL's agendas for widening participation and social inclusion
- The balance between collection spaces, quiet study spaces and group/project areas needs to be re-balanced
- The Library has a role, modelled on the Saltire Centre in Glasgow, to provide information about, and referrals to, UCL services and facilities such as the Registry, Students Union and Careers Service for all new UCL staff and students. The Library would wish to work in collaboration with the UCL Registry to develop this concept.

7.3 Long-term storage of paper materials

The Library has a remote Store at Belnor House, Wickford, for the retention of lesser-used materials. There is a van courier service which offers a 24-hr delivery service to sites in central London. Around 200 items a day are requested in term-time. Long-term, trustworthy digital preservation is not yet readily available as a service. UCL is likely to begin the systematic purchase of digital journal backfiles from publishers. In addition, the creation of a distributed UK Research Reserve, with electronic document delivery, will impact on the need for UCL to retain large back-runs of paper journals. The Master Planning Team analysed current technological developments, the creation of new national services, and identified UCL's future needs for long-term storage for paper materials.

UCL Library Services is one of the founding members of the partnership which supports the UK Research Reserve. The increasing purchase of journal backfiles means that UCL can work with the UK Research Reserve to share responsibilities for the long-term retention of paper copy. There seems no prospect of a similar arrangement for monographs, nor any academic support for the de-acquisition of paper copies of monographs from UCL. The Master Planning Team noted that the Library still acquires 1 mile of paper material a year and that the equivalent amount of material needs to be relegated from UCL's libraries in central London to make space on central sites for any new acquisitions. The Master Planning Team concluded that UCL Library Services was heavily dependent on the present storage facilities at Belnor House, Wickford, to maintain its current provision and that this storage facility would need to be retained at its present extent for at least the next ten years.

⁵ See <http://eprints.ucl.ac.uk>.

8. Architectural options

In discussion in the Master Planning Team, a number of architectural options were considered which were measured against the Business Objectives analysed in paragraph 6. Four options were eventually scored against a number of agreed criteria. The nature of the architectural options is described fully in the architectural Master Planning Report.

The four options were:

Do Nothing Option No refurbishment work in either the UCL Main or Science Libraries

UCL Main Library The work would comprise general refurbishment, the removal of some internal walls and the provision of openings within the second floor, to the North and South Wings; and include the addition of the floor space in the former French Corridor and new galleries in the Donaldson Reading Room, but the possible loss of the space currently occupied by the Dutch collections. The benefits include improved orientation, a gain of 6.2% in floor area, greater flexibility and efficiency, improved quality of the internal environment - all achieved within an acceptable level of decant, disruption and cost

UCL Science Library General refurbishment and including the removal of internal walls, the opening up of light wells to provide internal atria and the provision of a new vertical access and building services infrastructure. More invasive work on the building was deemed unacceptable in terms of disruption. There would be no overall gain in floor space, although this option could include expansion into the space occupied by the Petrie Museum, amounting to 540 m², or an increase of 12.7%. The benefits of this option include improved ground floor access and facilities, increased flexibility and efficiency, improved quality of internal space and environment - all achieved with an acceptable level of decant, disruption and cost.

Central Site Library This option provides an opportunity to relocate the majority of the library services with no intermediate decanting into a new building. This new building will benefit from an environment designed specifically for delivering current and future library services together with the operational efficiencies that will arise from a centralised library service. The overall internal gross floor area would be 12300 m², a 5% decrease on existing provision made possible by more efficient use of space. There are major benefits to UCL through a new library. A new site for a consolidated UCL Library Services would heighten the visibility of the Library to its users and enable the Library more fully to deliver its services to staff, students and external users. There are further benefits, as UCL would also be able to re-use and re-configure the space in the Wilkins and DMS Watson Buildings, and elsewhere in the UCL family of libraries, for academic purposes, or for income generation.

9. Options Appraisal

The results of the Options Appraisal are given in Figure 12. Following advice from UCL Estates and Facilities, a simple traffic lights system was used to evaluate each of the options:

- **Red** = significant requirements not satisfied
- **Orange** = partially meets the requirements
- **Green** = substantially meets the requirements

The option which came bottom was the Do Nothing option, whilst the one which came out top was the centralised library option.

Do Nothing Option

Most of the criteria in this option scored red. None of the Master Planning Team felt that a Do Nothing scenario was a realistic option, given the developments in library provision which they had seen on site visits. It was therefore rejected.

Wilkins Option 1

Three options were studied for the UCL Main Library, with increasing levels of invasive work to refurbish and re-configure the building to meet the needs of the Business Objectives. Options 2 and 3 were discarded because of the lack of adequate decant space for collections and reading areas, and the significant disruption to UCL core business (both in the Library and on the Ground Floor of the Wilkins Building) whilst building work was onsite. The remaining option, when fully implemented, would result in a net gain of 6.2% in gross internal floor area and cost £17.2m at today's prices. In the Options Appraisal, it scored highly against a number of criteria including ease of decant and the ability to phase the work.

Science Library Option 1

Three options for work in the UCL Science Library were worked up, with increasing levels of intervention. The more interventionist options were bold and exciting, but they had to be discounted because of the lack of adequate decanting space and the noise/disruption which would be caused to academic Departments in Foster Court and in the Engineering Faculty. The remaining option scored well in terms of the ability to decant materials during building works, and the possibility of phasing the works. Significantly, this option also scored green in terms of its ability to change and enhance the teaching and learning experience at UCL. If the Petrie Museum space were included in the footprint, Option 1 would add 12.7% to the gross floor area. Costs for the work (excluding the Petrie Museum space) are £25 m at today's prices.

Central site library (Newbuild)

This option scored green against nearly all the criteria. It would avoid most of the pitfalls in Options 1 for the UCL Main and Science Libraries. In addition, it could transform the teaching and learning experience at UCL and be attractive to potential donors. It would create a building with an overall gross floor area of 12300 m² at a cost, at today's prices, of £64.5m. It supposes that the building would be built on land already owned by UCL; in conjunction with UCL Estates and Facilities, a number of sites in Bloomsbury were considered and a building of the requisite size modelled onto that footprint. For the reasons outlined here, a central site library emerged as the favoured option amongst the UCL members of the Master Planning Team.

Criteria	Fit to Business Objectives (Response to Brief)	Ease of Decant (Availability of decanting space)	Brand/Image/Wow factor/Legacy	Value For Money/Cost efficiency	Identity/Orientation & Circulation	Quality/Variety of spaces/Flexibility	Environmental quality/sustainability/energy use	Disruption to UCL core activities	Planning risk / Timescale/ Phasing/ Interim benefits	Attractiveness to major funders	Change teaching & learning experience
Option											
Do Nothing	Red	Green	Red	Red	Red	Red	Red	n/a	n/a	Red	Red
UCL Main Library											
Option 1	Orange	Green	Orange	Green	Orange	Orange	Green	Orange	Green	Include Donaldson	Orange
UCL Science Library											
Option 1	Orange	Green	Red	Green	Orange	Orange	Orange	Orange	Green	Red	Green
Newbuild	Green	Green	Green	Green	Green	Green	Green	site dependent	Red	Green	Green

Figure 12: Evaluation of the top 4 options for future development of UCL library estate

10. Benefits to UCL

What are the benefits to UCL that each of these options brings? These can be discussed under the three headings.

Do Nothing

This is the most damaging option for UCL. In terms of the I-Barometer finding, a Do Nothing option would mean that UCL will fall further behind in international league tables for the provision of library and learning spaces. No member of the Master Planning Team felt that Do Nothing was an acceptable option. The Team concluded that continued investment in, and the radical development of, UCL's library estate was essential for UCL to improve the student experience.



Figure 13: The sole group working space in the UCL Main and Science Libraries, but situated in a public corridor



Figure 14: Overcrowded floor in the UCL Main Library, with shelving filling the area almost to capacity

Options 1 for the UCL Main and Science Libraries

These are very attractive options, because in logistical terms they provide modest increases in space and allow for refurbishment and the introduction of new services which academic departments have identified as important. It would be difficult to attract external funding for the UCL Science Library. Nevertheless, for expenditure of £25 million on the Science Library and £17.2 million on the Main Library, UCL would be able to make very significant improvements in its library estate and services.

In terms of the characteristics of the Library of the Future, identified in paragraph 7.2 above, Option 1 for the UCL Main and Science Libraries would deliver a substantial part of the vision. However, it would be difficult to introduce substantial group study/project spaces into the UCL Main Library - partly because of planning constraints in a Grade 1 Listed building and partly because Option 1 gives little new space to use. The same constraints would impede the ability to deliver more IT spaces in the Wilkins Building, in the form of centrally-managed cluster space for teaching and seminars, which has been requested by academic Departments. Options 1 for the UCL Main and Science Library would address the issue that UCL's teaching business opportunities are currently constrained by the availability of teaching space. It would be possible to develop more of a Business Case to support the gains.

Central Site Library

The Master Planning Team noted that this option was the most expensive, at £64.5m. However, the Team also felt that it delivered the greatest number of benefits to UCL - both to the Library and to academic departments.

In terms of delivering the vision of the Library of the Future outlined in paragraph 7.2, a newbuild central site library has obvious advantages. The balance between collections, learning/group/project and private study spaces can be scoped from the outset. Better use of space in a newbuild makes it easier to introduce new facilities, such as a Centre for Digitisation and E-Texts or a central advice/referrals service modelled on the Saltire Centre in Glasgow. It would also be easier to introduce new centrally-managed cluster facilities for group teaching and seminars than in the UCL Main and Science Libraries (Option 1).

A newbuild would allow UCL to collocate a number of separate library collections together in one new building. The libraries which are possibilities for such collocation are:

- UCL Main Library
- UCL Science Library
- UCL Eastman Dental Institute Library
- UCL Institute of Archaeology Library
- UCL Environmental Studies Library
- UCL Cruciform Library
- UCL Human Communications Science Library

A new classification sequence could be introduced to facilitate access to these collections (a development long requested by academic colleagues). UCL's standings in international surveys such as the I-Barometer would be likely to improve. The building could be built to accommodate the new facilities and services which have been requested by academic departments. There would be no decant or disruption issues, as present services could continue in their existing locations until the newbuild had been completed. Initial estimates suggest that efficiency savings in the Library, as a result of the central site library, would be in the region of £1.2 million per annum.

However, the newbuild central library option will require a lengthy period to plan, fundraise and implement. Therefore, should this option be pursued, attention will need to be given to ensuring that the quality of the existing accommodation within the UCL Main and Science Libraries does not continue to deteriorate. To provide an increased quality of library accommodation and to ensure that existing facilities are able to respond to and deliver a modern library service, it is therefore recommended that a level of refurbishment of these existing facilities is undertaken. Where refurbishment projects resulting in significant change are considered, e.g. the Donaldson Reading Room, the Brief for these projects should be developed in response to both the need to accommodate library activities and, for the longer term, alternative functions.

A significant benefit to UCL would be the release of library spaces in the Wilkins Building (4220m²) and DMS Watson Building (5307 m²) which can be handed back to UCL for academic use or for income generation. It would be a matter for UCL to decide how this space, once released, could be re-allocated, but it is likely that this represents the biggest single opportunity for UCL to gain such a significant amount of space on the Bloomsbury campus which it could re-purpose as it saw fit. The availability of this new space could act to improve UCL's financial position in a number of ways:

- By providing opportunities for new student programmes
- By acting as a space for sponsored research
- By providing opportunities for income generation

The Science Library, in particular, would lend itself to centrally-bookable teaching/seminar space for students and academic departments. Spaces in the Wilkins Building could be used for conference facilities/seminar rooms which could be income generating. The Donaldson Reading Room could be converted into the principal UCL Hall or bookable meeting room, which it currently lacks. It is one of the finest architectural spaces in UCL, leading as it does off the Flaxman Gallery and the Portico.

Initial estimates from UCL Estates and Facilities allow a net rental value of such space in the UCL Main and Science Libraries as £330 per m², which equates to an annual net rental value of £3,143,910 per annum. The net capital value of this estate is estimated by UCL Estates at £5,500 per m² or £52,398.500 in total.



Figure 15: The new and the old; new stairway in the UCL Main Library (left); and the 1930s frontage to the DMS Watson Building (right), which presents a depressing image of UCL's support for library services in Science, Technology and basic Medical Sciences

11. Comparator library developments in UK Universities: Buildings and Funding

The Master Planning Team has surveyed a number of UK research-led universities, to examine those universities' planned spend on library developments. These universities are Oxford, Cambridge, Aberdeen, and Sheffield. The Team is grateful to the respective University Librarians for permission to use the figures given below, which act as a benchmark to guide UCL in how it could take its plans for re-developing its library estate forward.

11.1 University of Aberdeen

The Master Planning Team noted that Aberdeen University has recently committed to building a new library at a cost of £57 million, the largest capital project ever undertaken by the University.⁶ The vision for the new library has more than a few echoes of the vision for future library provision in UCL:

- a landmark of learning, bringing high-quality students, researchers and academics to the University, supporting our academic ambitions and international reputation
- the heart of a University community which is growing in number and intellectual capital, attracting internationally distinguished scholars from around the world
- an exciting embodiment of the library of the future, in which new media and technology enhance a magnificent collection of books
- a secure, controlled environment for the protection and showcasing of our historic collections, and the opportunity to acquire further treasures
- open to all, with public spaces, exhibitions and events widening access for the public and the academic community nationally and internationally
- a visionary partnership with Danish architects schmidt hammer lassen, whose track record includes many award-winning public buildings
- the opportunity for supporters to be recognised as contributing to a great Scottish building for this millennium

In terms of funding, £30 million will come through fundraising and the remainder from the University of Aberdeen.

11.2 Cambridge University Library Cambridge

Spend on central library buildings 1994.

- 1998 Aoi Pavilion (Far Eastern books and Reading Room)
£3 million - private benefactor Mr Tadao Aoi
- 1998 Basement stack (first phase of West Bookstack)
£3 million
Funded by the University
- 1998 - 2001 Exhibition Centre, Entrance, (NW corner: Rare Books + MSS + Imaging Services)
£6.5 million
33% from Heritage Lottery Fund; remainder from external donations and University funding
- 2003 SW Corner (Digital Resources Area, Commonwealth Reading Room)
£6 million
External donation (US foundation)
- 2006 West Bookstacks (phase 1)
£6 million
University funding
- 2010? West Bookstacks (phase 2)
£7 million
70% requested from SRIF4 - rest University funding
- Betty and Gordon Moore Library
Maths, technology, physical sciences, plus collocation of Pure and Applied Maths Departmental libraries
£7.5million. Donation from Gordon Moore
- Squire Law Library
Housed in new Faculty of Law building
Whole building cost £21million

The above spend is for central libraries only. Additionally, the University of Cambridge has also spent significant sums refurbishing/extending the following Departmental libraries: Department of Chemistry Library, Institute of Criminology - Radzinowicz Library, Faculty of Education Library, and the Scott Polar Research Institute Library.⁷

11.3 University of Sheffield

The University has recently opened a new building, the Information Commons (IC).⁸ Since its opening on 10th April 2007 the Information Commons has quickly become one of the most popular places on campus. Designed with students in mind, the IC has over 1300 study spaces, more than 500 PCs and carries 100,000 of the most popular and heavily-used undergraduate texts. With 10 group study rooms available solely for student use, 2 state of the art IT-enabled classrooms and a variety of different study spaces the IC can cater to all needs.

For those who prefer peace and quiet, there are 3 different types of silent study area - there is a silent PC room, a large double-height space where laptops are not permitted and a study balcony where laptops are allowed. All of these areas are phone- and music-free zones.

For those who have a more informal study style, there are plenty of choices available. The IC is fully wireless enabled and with power points located in the floors near every soft-seating area, users can sit back and relax with their laptop on their knee if that is the style that suits them.

And if users want to work in a group they can book an enclosed study room, equipped with a PC and a whiteboard, or they can choose to work round a large group table with wide screen PC.

There are water fountains on every floor where users can top up water bottles, or they can go down to the ground floor and eat in the IC café. Cold drinks and small, wrapped snacks are allowed in designated areas of the building where the soft-seating is located; however hot drinks, hot food and cold meals must be consumed in the café area.

The cost of the facility was £23 million for a building of 11500 m² (gross), and 7,800 m² (net). £7 million came directly from HEFCE (of which £5 million came from the University's Learning and Teaching capital, £2 million from the CETL established in the IC), and the remaining £16 million from the University.

⁶ See *SCONUL Monthly*, December 2007 and <http://www.aberdeen.ac.uk/newlibrary/>.

⁷ For details of all Cambridge's spend on library estate projects, see http://webdoc.sub.gwdg.de/ebook/aw/qbs/qbs_37.pdf.

⁸ See <http://www.shef.ac.uk/infocommons/>.

11.4 University of Oxford

The University has planned to spend £125 million on its physical library estate between 2008-2014/15. 50% of this funding will come from the University itself.

Notable projects in this list are:

- the plans for a new Depository Store, costing £30 million, all of which is being provided by the University to house lesser-used books and periodicals remotely
- Renovation of the New Bodleian, which will cost £65 million. The University is contributing £25 million. £15 million is being sought by the University from a Foundation. There is another oral pledge of £5 million
- Humanities Library - a new facility which will bring together 10 Faculty libraries as part of a new Humanities Building. 8000 m² of space for 1,000,000 vols and 650 reader seats. The cost of the library space is estimated at £30 million, which will be the target of fundraising.

In terms of recently-completed projects, the following is noteworthy:

- Social Sciences Library - a Norman Foster Building of 3000 m², which enabled several Social Sciences libraries to be closed; geared towards taught course provision. Cost: £10 million at today's prices, all provided by external fundraising

12. Next steps

The Library Report, and the Master Planning Report, will be distributed to UCL's Estates Management Committee and Library Committee in second term 2008 for consideration.

The Reports show that, for UCL to possess library estate and facilities which meet the needs of students and staff in the twenty-first century, there are two options. The first is for UCL Library Services to extend and refurbish the UCL Main and Science Libraries at a cost, at today's prices, of £42.2 million. This would give the University vastly-improved accommodation and facilitate the new development of learning spaces, student-centred facilities and new services which have been identified by members of UCL. The next step, if UCL is minded to proceed on this path, would then be to:

- prepare a detailed case and business plan according to EMC's published guidelines [Appendix 8/62 (06-07)]
- confirm the Library's Brief and requirements
- confirm the timetable for phasing the work throughout both buildings, to ensure continuity in service provision
- confirm the availability of adequate decant space, working up options identified in the Master Planning exercise
- agree a fundraising strategy in UCL
- work up detailed architectural schemes for both buildings

An interesting option, and the preferred option from the Options Appraisal, is for a central-site newbuild on land already owned by UCL, within 10 minutes walk of the Bloomsbury campus. This would allow the relocation of the UCL Main and Science Libraries, and a number of site libraries, into one building with resulting efficiencies. 9527 m² of space in the present UCL Main and Science Libraries will be released back to UCL for academic use/income generation. The value of this space has been estimated by UCL Estates and Facilities to have an annual net rental value of £3,143,910 and a net capital value of £52,398,500.

The nature of a central newbuild facility needs more scoping. The next step, if UCL is minded to proceed on this path, would be to:

- prepare a detailed case and business plan according to EMC's published guidelines [Appendix 8/62 (06-07)]
- determine what level of refurbishment in the UCL Main and Science Libraries is required until the central site newbuild is available
- work up a detailed business case to support this option
- confirm the availability of a suitable site, using the case studies identified by UCL Estates and Facilities during the Master Planning exercise, and analysing other site options
 - identify fully operational efficiencies that would accrue through this option
 - identify the running costs of a central site newbuild
 - work up architectural options for a central site newbuild
 - agree a fundraising strategy in UCL

UCL members of the Master Planning Team

Appendix: UCL Library Services' sites

UCL Library Services

[UCL Main Library](#)

Arts and Humanities, economics, public policy, law

[UCL Science Library](#)

Engineering, Life Sciences, Mathematical and Physical Sciences, anthropology, geography, management

[Archway Healthcare Library](#)

Medicine, nursing and allied health

[UCL Cruciform Library](#)

General clinical and medical sciences

[UCL Eastman Dental Institute Library](#)

Oral health sciences

[UCL Environmental Studies Library](#)

Architecture, town planning

[UCL Human Communication Science Library](#)

(NICeST: National Information Centre for Speech/language Therapy), Speech & language therapy, communication disorders, linguistics & phonetics, special education, audiology, voice

[UCL Institute of Archaeology Library](#)

Archaeology, Egyptology

[UCL Institute of Child Health Library](#)

Paediatrics, international child health, paediatric nursing, allied health

[UCL Institute of Laryngology & Otology & RNID Library](#)

Laryngology, otology, rhinology, surgery

[UCL Institute of Neurology, Rockefeller Medical Library](#)

Neurosurgery, neuroscience

[Joint Moorfields Eye Hospital & the Institute of Ophthalmology Library](#)

Ophthalmology, visual science, biomedicine, medicine, nursing

[UCL Institute of Orthopaedics Library](#)

Musculoskeletal sciences, orthopaedics

[Royal Free Hospital Medical Library, UCL Library Services](#)

General clinical and medical sciences

[UCL School of Slavonic & East European Studies Library and Information Services](#)

Languages, literature, history, politics, economics, geography and bibliography of Eastern Europe

[UCL Special Collections](#)

Medieval period to present day, wide range of subject areas

[Store information](#)

Belnor House, Wickford
All subjects